

### **REMARKS**

Applicants thank the Examiner for the thorough examination given the present application.

#### **Status of the Claims**

Claims 1, 2, and 4-6 are pending in the present application. Support for the amendments to claims 1 and 2 can be found in Table 7 of the present specification (Example 32). Thus, no new matter has been added.

Applicants submit that the present Amendment reduces the number of issues under consideration and places the case in condition for allowance. Alternatively, entry of the present amendment is proper to place the claims in better form for appeal.

In view of the following remarks, Applicants respectfully request that the Examiner withdraw all rejections and allow the currently pending claims.

#### **Priority under 35 U.S.C. § 119**

The Examiner has not acknowledged Applicants' claim for foreign priority under 35 U.S.C. § 119 and receipt of the certified priority document. Acknowledgment thereof by the Examiner in the next Office Action is respectfully requested.

#### **Information Disclosure Citation**

Applicants thank the Examiner for considering the references supplied with the Information Disclosure Statement filed January 21, 2009 and for providing Applicants with an initialed copy of the PTO-SB08 form filed therewith.

#### **Issues under 35 U.S.C. § 103(a)**

Claims 1-2 and 4-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yasuyori et al. '422 (JP 2003-012422) in view of Hayashi et al. '227 (US 6,695,227). Applicants respectfully traverse. Reconsideration and withdrawal of this rejection are respectfully requested.

Legal Standard for Determining Prima Facie Obviousness

MPEP 2141 sets forth the guidelines in determining obviousness. First, the Examiner has to take into account the factual inquiries set forth in *Graham v. John Deere*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), which has provided the controlling framework for an obviousness analysis. The four *Graham* factors are:

- (a) determining the scope and content of the prior art;
- (b) ascertaining the differences between the prior art and the claims in issue;
- (c) resolving the level of ordinary skill in the pertinent art; and
- (d) evaluating any evidence of secondary considerations.

*Graham v. John Deere*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966).

Second, the Examiner has to provide some rationale for determining obviousness. MPEP 2143 sets forth some rationales that were established in the recent decision of *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007).

As the MPEP directs, all claim limitations must be considered in view of the cited prior art in order to establish a *prima facie* case of obviousness. See MPEP 2143.03.

Distinctions over the Cited References

The Examiner asserts that paragraph [0011] of Yasuyori et al. '422 discloses that the solvent is 10% or less by weight (page 6 of the outstanding Office Action). Applicants respectfully traverse. As clarified in the enclosed partial English translation of paragraphs [0009] and [0011] of Yasuyori et al. '422, the phrase "10% or less by weight" is the amount of the solvent excluding the saturated hydrocarbon contained therein.

The present invention is based on the technical idea that the amount of solvent is reduced as much as possible. In contrast, Yasuyori et al. '422 suggest that a solvent is needed in an amount of 10% by weight or higher. Specifically, Yasuyori et al. '422 disclose the weight ratio of a solution to a propellant as 4/6 to 1/9 (i.e., 10-40% by weight) (paragraph [0015]). Thus, the minimum amount of the solution is 10% by weight. The solution consists of a large amount of solvent and a very small amount of active component. The active component is present in an amount of 0.01 to 5% by weight of the solution (paragraph [0008]). Thus, the remaining portion in the solution is solvent.

In the paragraph bridging pages 6-7 of the outstanding Office Action, the Examiner states:

Applicants argue Yasuyori teaches a particle size range of 20-40  $\mu\text{m}$ , however the size of the sprayed particles of the present invention are much larger which is unexpected. The Examiner is not persuaded by this argument because claim 1 limits the average particle diameter to from 15 to 45  $\mu\text{m}$ . Hence, Yasuyori teaches a particle size of at least 40  $\mu\text{m}$ . Furthermore, Applicant has failed to demonstrate a much larger particle size than expected in the form of a side-by-side comparison with the teachings of Yasuyori.

In response, enclosed herewith is a 37 CFR § 1.132 Declaration of Masaaki Sugiura, one of the present inventors, which shows the difference in the average particle size at the distances of 50 cm and 150 cm. The Examiner is respectfully requested to review the enclosed Declaration of Masaaki Sugiura as it provides strong evidence of the patentability of the present invention.

According to the results of the Declaration, in the aerosols  $\alpha$  and  $\beta$  in which the orifice diameter of the actuator and the container inner pressure are adjusted to the claimed range of the present invention, the sprayed particles have a large particle diameter exceeding 40  $\mu\text{m}$  at a distance of 50 cm away from spraying. However, at a point 150 cm away from the orifice, the average particle diameter of the aerosol  $\beta$  is 19.43  $\mu\text{m}$ , approximating the lower limit of 19.1  $\mu\text{m}$  of the claimed range for the average particle diameter at a point 150 cm away from the orifice. As described above, the average particle diameters at a point 150 cm away from the orifice for the aerosols  $\alpha$  and  $\beta$  are both around the lower limit of claims 1-2 and have diameters exceeding 40  $\mu\text{m}$  at a point 50 cm away from the orifice. Therefore, there is a high probability that the average particle diameter of the particles sprayed from the aerosol of the present invention at a point 50 cm away from the orifice would exceed 40  $\mu\text{m}$ . Accordingly, the aerosol of the present invention allows spray particles having larger particle sizes than the aerosols described in the Yasuyori et al. '422 reference, which is designed to spray particles having a volume-average particle diameter of from 20 to 40  $\mu\text{m}$  at a point 50 cm away from the orifice.

To establish a *prima facie* case of obviousness of a claimed invention, all of the claim limitations must be disclosed by the cited references. As discussed above, Yasuyori et al. '422 in view of Hayashi et al. '227 fail to disclose all of the claim limitations of independent claims 1-2, and those claims dependent thereon. Specifically, the cited references fail to disclose the claimed amount of solvent or the claimed average particle diameter at a point 150 cm away from the orifice. Accordingly, the references do not render the present invention obvious.

Furthermore, the cited references or the knowledge in the art provide no reason or rationale that would allow one of ordinary skill in the art to arrive at the present invention as claimed. Therefore, a *prima facie* case of obviousness has not been established, and withdrawal of the outstanding rejection is respectfully requested. Any contentions of the USPTO to the contrary must be reconsidered at present.

### Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Chad M. Rink, Registration No. 58,258, at the telephone number of the undersigned below to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Director is hereby authorized in this, concurrent, and future replies to charge any fees required during the pendency of the above-identified application or credit any overpayment to Deposit Account No. 02-2448.

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Respectfully submitted,

By 

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### Attachments:

partial English translation of paragraphs [0009] and [0011] of Yasuyori et al. '422; and  
37 CFR § 1.132 Declaration of Masaaki Sugiura.